



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,315	10/07/2005	Valentina Ivanovna Akhapkina	V-322	6642
802 7590 02/25/2009				
PATENTTM.US				
P. O. BOX 82788				
PORTLAND, OR 97282-0788				
EXAMINER				
KIM, JENNIFER M				
ART UNIT		PAPER NUMBER		
1617				
MAIL DATE		DELIVERY MODE		
02/25/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,315

Applicant(s)

AKHAPKINA ET AL.

Examiner

JENNIFER MYONG M. KIM

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/22/2009.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-944)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on February 11, 2009 has been entered.

Action Summary

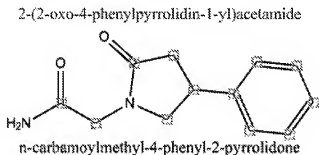
The rejection of claim 2 under 35 U.S.C. 102(b) as being anticipated by INSTITUT MEDIKO-BIOLOGICHESKIKH PROBLEM et al. (RU 205051) of record is being maintained for the reasons stated in the previous Office Action.

The rejection of claim 2 under 35 U.S.C. 102(b) as being anticipated by Applicants' admission is being maintained for the reasons stated in the previous Office Action.

The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Differding et al. (WO 01/62726A2) is being maintained for the reasons stated in the previous Office Action.

Response to Arguments

Applicants' arguments filed February 11, 2009 have been fully considered but they are not persuasive. Applicants argue that the cited Differding reference does not disclose treatment of depression with use of N-carbamoyl-methyl-4-phenyl-2-pyrrolidone specified in claim 1 of the present application and that Differding only specified that 2-oxo-1-pyrrolidine derivatives are useful at treatment of depression. This is not found to be persuasive because it is noted that the compound, N-carbamoyl-methyl-4-phenyl-2-pyrrolidone specified in claim 1, is also called 2-(2-oxo-4-phenylpyrrolidin-1-yl)acetamide. That is, the compound specified in claim 1 is 2-oxo-1-pyrrolidine compounds that is taught in Differding reference. This compound is encompassed by the generic structure of the compounds in Differding's claims 1 and 34). The structure of the compound is depicted below:



It appears that Applicants are not disagreeing with the teaching that the disclosed 2-oxo-1-pyrrolidine taught by Differding for the treatment of depression. Accordingly, it

would have been obvious to one of ordinary skill in the art to interchange one compound for another when specific compounds are taught as equivalents and the antidepressant utility is retained. Accordingly, the instant claim is obvious therefrom.

With regard to claim 2, Applicants argue that Applicants' admission of RU 2050851 of the substance N-carbamyl-methyl-4-phenyl-2-pyrrolidone having nootropic activity does not teach or suggest its use for the treatment of depression, and that PEPSCH is directed to compounds not the use thereof. This is not found to be persuasive because it is noted that instant claim 2 is drawn to "composition" claim and the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Applicants' claimed "composition" is indistinguishable from the structure or the compound of N-carbamyl-methyl-4-phenyl-2-pyrrolidone.

Thus, the claims fail to patentably distinguish over the state of the art as represented by the cited references.

It is suggested that Applicants submit a declaration to clearly establish a surprising and unexpected result using Applicants teaching.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by INSTITUT MEDIKO-BIOLOGICHESKIKH PROBLEM et al. (RU 205051) of record.

INSTITUT MEDIKO-BIOLOGICHESKIKH PROBLEM teaches the use of N-carbamoylmethyl-4-phenyl-2-pyrrolidone (carphedon, also known as phenotropyl) as an agent with nootropic activity. (see also international search report).

The limitation of "treatment of depression" is noted. However, where the claimed invention is a chemical compound, the "compound and all of its properties are inseparable; they are one and the same thing". In re Papesch, 315, F2d 381, 391 (C.C.P.A. 1963). In this case, the same active substance is taught by the reference. Therefore, the same active substance taught by the reference would inherently have the properties of displaying antidepressant activity. The reference clearly anticipates the claimed substance. It discusses the same chemical compound. It must possess the same properties as claimed because it is one and the same compound.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Applicants' admission.

Applicants admit that phenotropyl (also known as N-carbamoylmethyl-4-phenyl-2-pyrrolidone) is known as a substance having nootropic activity taught in RU2050851. (see specification page 2, lines 9-12).

The limitation of “treatment of depression” is noted. However, where the claimed invention is a chemical compound, the “compound and all of its properties are inseparable; they are one and the same thing”. In re Papesch, 315, F2d 381, 391 (C.C.P.A. 1963). In this case, the same active substance is taught by the reference. Therefore, the same active substance taught by the reference would inherently have the properties of displaying antidepressant activity. The reference clearly anticipates the claimed substance because it discloses the same chemical compound with properties inseparable as claimed from that compound.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 102(b).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Differding et al. (WO 01/62726A2) of record.

Differding et al. teach that 2-oxo-1-pyrrolidine derivatives of formula (I) including 2-(2-oxo-4-phenyl-pyrrolidinyl)acetamide (also known as N-carbamoylmethyl-4-phenyl-2-pyrrolidone set forth in claim 1) is useful for the treatment of depression. (page 67 compound 2, page 89 claims 1 and 33-36).

Differding et al. do not expressly exemplify the treatment of depression comprising administering N-carbamoylmethyl-4-phenyl-2-pyrrolidone set forth in claim 1.

It would have been obvious to one of ordinary skill in the art to employ any one of 2-oxo-1-pyrrolidine derivatives of formula (I) including N-carbamoylmethyl-4-phenyl-2-pyrrolidone set forth in claim 1 because Differding et al. teach that the 2-oxo-1-pyrrolidine derivatives of formula (I) including 2-(2-oxo-4-phenylpyrrolidinyl)acetamide (also known as N-carbamoylmethyl-4-phenyl-2-pyrrolidone is effective for the treatment of depression and because such derivatives are equivalents and the effectiveness of antidepressant activity is retained. One would have been motivated to make such modification in order to achieve an expected benefit of treating depression in a patient suffering from such disorder with N-carbamoylmethyl-4-phenyl-2-pyrrolidone taught to be effective in treating depressive disorder in view of Differding et al.

None of the claims are allowed.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER M. KIM whose telephone number is (571)272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer Kim/
Primary Examiner, Art Unit 1617

Jmk
February 19, 2009